7th International Workshop on

Plasma Scientech for All Something (PLASAS-7)

November 6 – 8, 2015, Morioka, Japan



Main Theme: Plasma basis and applications

• Hosting: PLASAS-7 Executive Committee

• Joint Hosting: Fundamentals and Materials Society,

The Institute of Electrical Engineers of Japan

IEEE Japan Chapter (NPS-05)

Plasma Life Science and Technology Group,

Soft-Path Engineering Research Center (SPERC), Iwate University

• Sponsorship ASTECH Corporation

Keisoku Engineering System Co., Ltd. KATAGIRI ENGINERING CO., Ltd.

· Financial Support:

IEEE Japan Chapter (NPS-05)

PLASAS-7 Committee

Organizing Committees

TAKAKI Koichi (Chair) Iwate University, Japan

OUYANG Jiting (Co-Chair) Beijing Institute of Technology, China

Advisory Committees

YUKIMURA Ken National Institute of Advanced Industrial Science and Technology

(AIST), Japan; Iwate University, Japan; Southwest Jiaotong

University, China; Harbin Institute of Technology, China

CHEN Qiang Beijing Institute of Graphic Communication, China

Local Steering Committees

MUKAIGAWA Seiji Iwate University, Japan

TAKAHASHI Kazunori Tohoku University, Japan

ODA Akinori Chiba Institute of Technology, Japan

AKATSUKA Hiroshi Tokyo Institute of Technology, Japan

KIM Jaeho National Institute of Advanced Industrial Science and Technology

(AIST), Japan

KOUSAKA HiroyukiNagoya University, JapanOHTA TakayukiMeijo University, Japan

WANG Douyan Kumamoto University, Japan

ICHIKI Ryuta Oita University, Japan

TONG Lizhu Keisoku Engineering System Co., Ltd, Japan

AKIYAMA Masahiro Iwate University, Japan

WAKI Hiroyuki Iwate University, Japan

OKUMURA Takamasa Iwate University, Japan

TAKAHASHI Katsuyuki Iwate University, Japan

Workshop Venue

Techno Hall, Faculty of Engineering, Iwate University, 4-3-5, Ueda, Morioka, Iwate, 020-8551 Japan

Registration fee: 25,000 JPY

PLASAS-7 PROGRAM

November 6 (Friday)

19:00 –	Welcome Dinner (Beer Restaurant ARIV Morioka)	
November 7 (Saturday)		
Venue	Techno Hall, Faculty of Engineering, Iwate University	
9:00 – 9:05	Opening Address	
9:05 – 9:35	KOUSAKA Hiroyuki, Nagoya University	
	"Tribological properties of Si-DLC deposited by ultra-high speed coating method with microwave assistance"	
9:35 – 10:05	ICHIKI Ryuta, Oita University	
	"Improving Metal Surface with Nitrogen-Based Atmospheric-Pressure Plasma"	
10:05 – 10:35	TAKAHASHI Kazunori, Tohoku University	
	"Neutral-depletion-induced plasma structure and momentum transport in a helicon source"	
10:35 – 10:45	Coffee Break	
10:45 – 11:15	KIM Jaeho, National Institute of Advanced Industrial	
	Science and Technology (AIST)	
	"Advanced microwave plasma sources based on microstrip line"	
11:15 – 11:45	OHTA Takayuki, Meijo University	
	"Novel substrate temperature measurement using optical interferometry"	
11:45 – 12:15	ODA Akinori, Chiba Institute of Technology	
	"Computational study on fundamental properties in non-thermal atmospheric pressure plasmas"	

12:15 – 13:00	Lunch
13:00 – 13:30	AKATSUKA Hiroshi, <i>Tokyo Institute of Technology</i> "Temperature and Density Monitoring of Argon Plasma by Intensity Ratio Measurement of Ar I lines by Collisional Radiative Model"
13:30 – 14:00	ZHONG Xiaoxia, Shanghai Jiaotong University "Synthesis of nanoparticles by using atmospheric microplasma" (Invited)
14:00 – 14:30	WANG Liyan, <i>Tsinghua University</i> "ARTP - A novel powerful Non-GMO mutation breeding method" (Invited)
14:30 – 15:00	TONG Lizhu, Keisoku Engineering System Co., Ltd. "Numerical investigation of microwave microstrip plasma source"
15:00 – 15:10	Coffee Break
15:10 – 15:15	TAKAKI Koichi, Iwate University
15:15 – 15:40	AKIYAMA Masahiro, <i>Iwate University</i> "Study of Bubble behaviors after Electrical Discharges in Water"
15:40 – 16:05	TAKAHASHI Katsuyuki, <i>Iwate University</i> "Water remediation using discharge plasma inside bubble"
16:05 – 16:30	OKUMURA Takamasa, <i>Iwate University</i> "Conformational Change of Protein with AC Electric Field for Keeping Freshness of Marine Products"
16:30 – 16:55	WAKI Hiroyuki, <i>Iwate University</i> "Damage Detection in Plasma Sprayed Coatings under Thermal Shock Condition using Laser Speckle Strain"

16:55 – 17:20 MUKAIGAWA Seiji, *Iwate University*

"Self-organization in dielectric barrier discharge and control of hexagonal

structures"

18:00 – 20:30 Banquet

(Restaurant ONINOTE)

November 8 (Sunday)

Venue Techno Hall, Faculty of Engineering, Iwate University

10:00 – 11:30 Lab Tour

11:30 – 12:00 Committee meeting

12:00 – 12:10 Closing

12:10 – Excursion